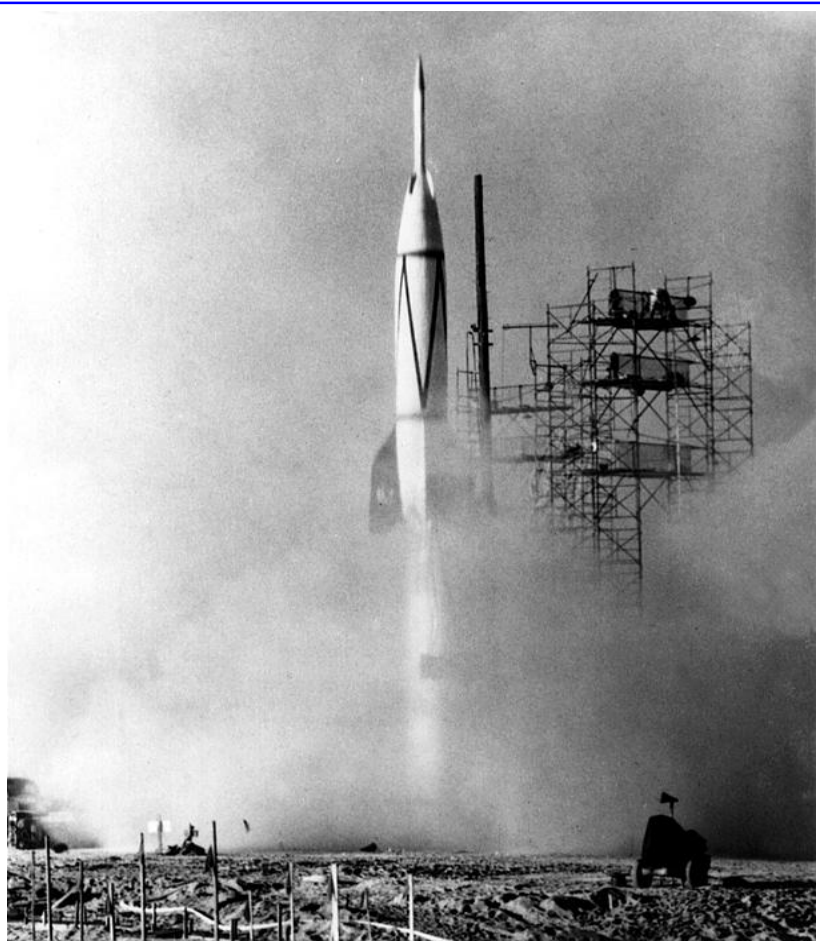


UNITED STATES SPACE PROGRAM FIRSTS

Unmanned & Manned Mission Firsts



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Foreword

This summary of the United States space program firsts was compiled from various reference publications available in the Kennedy Space Center Library Archives.

The list is divided into three sections. Unmanned mission firsts, Manned mission firsts and Space Shuttle mission firsts.

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DATE	UNMANNED EVENTS	MISSION
07/24/1950	First missile launched at Cape Canaveral	Bumper V-2
08/20/1953	First Redstone missile was fired	Redstone 1
12/17/1957	First long range weapon launched	Atlas ICBM
01/31/1958	First satellite launched by USA	Explorer 1
10/11/1958	First observations of Earth's and interplanetary magnetic field	Pioneer 1
12/13/1958	First capsule containing living cargo, squirrel monkey, Gordo. Although not a NASA mission, data was utilized in Project Mercury planning	Bioflight 1
02/17/1959	First fully instrumented Vanguard payload First Earth photos from satellite	Vanguard 2
03/03/1959	First US sun-orbiter, a US-IGY space probe	Pioneer IV
04/01/1960	First World's weather satellite	Tiros 1
05/13/1960	First use of the Delta launch vehicle	Echo
08/12/1960	First passive communications satellite by NASA	Echo I
01/31/1961	First fully equipped, operational Mercury capsule suborbital test launch with primate, Ham, onboard	MR-2
02/16/1961	First spacecraft orbited by an all solid rocket	Explorer 9
08/16/1961	First to investigate solar winds, interplanetary magnetic fields, and energetic particles.	Explorer 12
11/18/1961	First test of spacecraft systems designed for future lunar and interplanetary missions	Ranger II
11/29/1961	First Chimpanzee to orbit the Earth, Enos	MA-5
01/26/1962	First measurement of interplanetary gamma ray flux	Ranger 3
04/24/1962	First transmission of TV pictures in space	Echo I
04/26/1962	First international satellite; joint venture between United States and United Kingdom	Ariel I
07/10/1962	First privately financed satellite and First telephone and TV experiments transmitted	Telstar 1
08/27/1962	First spacecraft to scan another planet [Venus]	Mariner 2
09/29/1962	First NASA launch from WTR First use by NASA of the Thor Agena launch vehicle	Alouette 1
12/13/1962	First active repeater communications satellite in an orbit	Relay 1
02/14/1963	First test of a communication satellite in geosynchronous orbit	Syncom I
04/18/1963	First in NASA sounding rocket program when NASA launched 85 pound scientific payload to 208 mile altitude	Explorer 17
05/03/1963	First drop test of Project Apollo earth landing system	Apollo Project
07/26/1963	First world's satellite to achieve synchronous 24-hour orbit	Syncom 2
11/22/1963	First live transmission of TV signals across Pacific via communications satellite	Relay I
11/26/1963	First interplanetary monitoring platform to observe interplanetary space	Explorer 18
11/27/1963	First successful launch of Atlas/Centaur	Atlas/Centaur
01/29/1964	First test flight of the new Block II vehicles [SA-5]	Saturn 1
02/26/1964	First visual telecast via communications satellite of the Liston vs Clay Championship fight.	Relay II
04/08/1964	First Project Gemini flight which tested the Titan II launch vehicle	GT-1
04/14/1964	First launch of Project Fire re-entry vehicle in support of Project Apollo	Fire 1
05/28/1964	First major flight test in Project Apollo [SA-6]	Saturn 1
08/19/1964	First launch of a Delta using strap-on solid motors [3] to increase first stage thrust	Syncom 3

DATE	UNMANNED EVENTS	MISSION
08/28/1964	First NASA program to develop and operate advanced meteorological space observatories	Nimbus 1
09/04/1964	First Orbiting Geophysical Observatory, designed to conduct numerous space experiments simultaneously	OGO 1
09/18/1964	First demonstration of Launch Escape System [LES] design [SA-7]	Saturn
11/21/1964	First dual payload	Explorer 24
11/28/1964	First successful Mars probe	Mariner 4
12/08/1964	First test of Apollo emergency detection system at abort altitude.	Apollo Abort
01/22/1965	First Cartwheel configuration for Weather Bureau's Operational system.	Tiros 9
02/16/1965	First primary use of capacity-type penetration detector	Pegasus 1
04/06/1965	First commercial satellite launched by NASA for COMSAT Corp on a reimbursable basis	Intelsat 1 [F-1] [Early Bird]
07/01/1965	First US Weather Bureau funded spacecraft	Tiros 10
11/06/1965	First launch of a Geodetic Earth Orbiting Satellite	GEOS 1 [Explorer 29]
02/03/1966	First TIROS Operational Satellite [TOS] of series funded by Environmental Science Services Administration	ESSA 1
02/26/1966	First launch of two stage Saturn IB [AS-201] and Apollo spacecraft [009]	Apollo-Saturn
05/25/1966	First Saturn V stack from VAB to Launch Complex 39A	Saturn 500F
05/30/1966	First US spacecraft to soft land on the Moon	Surveyor 1
07/01/1966	First Anchored Interplanetary Monitoring Platform [AIMP] designed to become the nation's first Moon satellite	Explorer 33
08/10/1966	First US spacecraft to orbit and photograph the Moon	Lunar Orbiter I
08/25/1966	First use of spacecraft fuel cell power system [AS 202]	Apollo-Saturn
12/06/1966	First satellite in Applications Technology Satellite program First successful transmission of fingerprint records via satellite reported by Government Photography 3/72	ATS 1
03/14/1967	First pictures ever taken of an identifiable outline of a man-made object that landed on the Moon	Lunar Orbiter III of Surveyor 1
04/26/1967	First satellite launch attempt from a mobile sea-based platform	San Marco II
05/05/1967	First UK built satellite to extend atmospheric and ionospheric investigations	Ariel III
08/18/1967	First fireproof version of the spacecraft fabric Velcro is perfected for First manned Apollo mission.	Apollo 7
08/26/1967	First Saturn V rollout from VAB to LC 39A	Apollo 4
11/09/1967	First flight test of Apollo/Saturn V space vehicle First launch from Saturn V facilities LC-39 at KSC First "all-up" test of a launch vehicle	Apollo 4
12/13/1967	First NASA piggyback payload	TETR-1/Pioneer 8
01/22/1968	First Earth orbital test [unmanned] of Apollo spacecraft Lunar Module [LM]	Apollo 5
05/18/1968	First NASA launch using long-tank Thor-Agena [U]	Nimbus
09/18/1968	First global communications network satellite	Intelsat III
12/05/1968	First satellite produced by the ESTC for the European Space Research Organization [ESRO]	HEOS 1
02/24/1969	First Mariner launch with the Atlas/Centaur launch vehicle	Mariner 6
09/17/1969	First public display of lunar rock at Smithsonian Institution	Apollo 11
11/21/1969	First United Kingdom communications satellite	Skynet 1
03/20/1970	First communications satellite for NATO	NATOSAT 1
12/11/1970	First operational second-generation meteorological satellite with three axis stabilization and nighttime viewing capability	NOAA 1

DATE	UNMANNED EVENTS	MISSION
01/25/1971	First flight of an uprated Atlas SLV-3C first stage	Intelsat IV F-2
03/02/1972	First spacecraft to reach Jupiter First spacecraft to penetrate and cross the asteroid belt First spacecraft to provide "in situ" measurements of Jupiter's environment First spacecraft to take close-up pictures of Jupiter First NASA spacecraft to use all-nuclear electrical power First spacecraft capable of operating beyond the influence of the Sun First spacecraft to fly beyond the orbit of Mars First manmade object to leave solar system	Pioneer 10
07/23/1972	First use of Delta Inertial Guidance System First use of nine strap-on solid propellant motors on first stage	Landsat 1 [formerly ERTS 1]
11/09/1972	First flight of a three-stage Delta "Straight Eight" configuration First domestic communications satellite for Canada	Anik A F-1 [Telesat 1]
11/27/1972	First detailed map of another planet, Mars, prepared by photos taken by spacecraft	Mariner 9
04/05/1973	First spacecraft to fly to Saturn First spacecraft to take close-up pictures of Saturn First spacecraft to provide pictures of the polar regions of Jupiter	Pioneer 11
11/03/1973	First spacecraft to explore the planet Mercury	Mariner 10
12/16/1973	First spacecraft in a series of Atmosphere Explorers	Explorer 51
02/11/1974	First launch of Titan/Centaur launch vehicle	Titan-Centaur Proof Flight
04/13/1974	First satellite for domestic communications	Westar 1
05/17/1974	First prototype geosynchronous orbit weather satellite	SMS 1
11/03/1974	First polar images of Jupiter sent back to Earth	Pioneer 11
12/10/1974	First launch in joint project of the US and West Germany	Helios 1
08/20/1975	First soft landing on Mars	Viking 1
10/16/1975	First operational satellite in NOAA's geosynchronous weather satellite system	SMS-C/GOES A
12/12/1975	First flight of the model 3914 Delta launch vehicle First RCA domestic communications satellite	Satcom 1 [RCA A]
02/19/1976	First US Maritime Communications Satellite in geosynchronous orbit	Marisat 1
04/17/1976	First perihelion passage as programmed closest approach to the sun	Helios 2
05/13/1976	First communications satellite designed for lease to AT&T	Comstar D-1
07/08/1976	First domestic communications satellite to service Indonesia's 3,000 islands & 120 million people	Palapa 1
04/20/1977	First geosynchronous scientific satellite owned and developed by the European Space Agency	Geos
08/12/1977	First spacecraft to detect high energy radiation, X-rays, gamma rays, and cosmic rays.	HEAO 1
08/20/1977	First spacecraft flyby of Neptune First spacecraft flyby of Uranus First photos taken of Neptune and Neptune's moons and satellites	Voyager 2
08/25/1977	First communications satellite owned and operated by Italy to be placed in a geosynchronous orbit	Sirio
09/05/1977	First spacecraft flyby of Jupiter First spacecraft flyby of Saturn First photos of Jupiter & Jupiter's moons First photos of Saturn's complex ring system, providing first close-ups of unexpected patterns and other characteristics which defied several gravitational theories	Voyager 1
10/22/1977	First International Sun-Earth Explorers in a three-spacecraft series	ISEE 1/ISEE 2
02/09/1978	First military satellite designed for worldwide communications for military use	FLTSATCOM 1

DATE	UNMANNED EVENTS	MISSION
05/20/1978	First spacecraft placed in orbit around Venus	Pioneer Venus 1
01/30/1979	First spacecraft devoted primarily to studying the near-Earth environment	SCATHA
02/14/1980	First solar satellite designed to study solar phenomena	SMM-A
11/15/1980	First satellite implementing a business communications system	SBS 1
12/06/1980	First of a new generation of satellites to be deployed in geosynchronous orbit.	Intelsat V F-2
01/25/1983	First Infrared Astronomical Satellite all-sky survey for object that emit infrared radiation	IRAS
06/28/1983	First venture of Hughes Aircraft into the field of operational spacecraft	Galaxy 1
06/09/1984	First launch of the upgraded Atlas/Centaur launch vehicle	Intelsat V F-9
07/28/1983	First Telstar owned by AT&T to be used as an operational spacecraft	Telstar 3A
03/22/1985	First in a series of improved Commercial Communication satellites for Intelsat	Intelsat V-A F-10
09/05/1986	First Strategic Defense Initiative Organization payload	SDI-1
04/05/1990	First Pegasus satellite demonstration flight of the Pegasus launch vehicle	Pegasus
07/03/1992	First of the Small Explorer [SMEX] fleet carrying four cosmic ray monitoring instruments	SAMPEX
05/24/2000	First launch of the new Atlas III launch vehicle First Russian rocket engine was used to power a US launch vehicle	Eutelsat W4

DATE	MANNED EVENTS	MISSION
05/05/1961	First US suborbital manned space flight First controlled spaceflight [Shepard]	MR-3
02/20/1962	First American manned orbital space flight [Glenn] First time frogmen were dropped into water during recovery to attach floatation device & assist in recovery First astronaut to address the United Nations [Glenn]	MA-6
10/03/1962	First liquor in space -miniature of scotch	MA-8
05/15/1963	First US flight in excess of a day	MA-9
10/31/1964	First NASA astronaut or trainee to lose life, Theodore Freeman	N/A
03/23/1965	First control of re-entry flight path using maneuverable spacecraft First manned Gemini mission [Grissom/Young]	GT-3
06/03/1965	First space walk by an American [White] First use of personal propulsion unit during EVA First astronauts to wear the American flag on their suits First use of the Mission Control Center in Houston	GT-4
08/21/1965	First US flight in excess of a week First use of the fuel cell	GT-5
12/04/1965	First US space flight in which part of the flight was made without space suit	GT 7
12/15/1965	First world's rendezvous between two spacecraft using GT-7	GT-6A
03/16/1966	First civilian astronaut to fly in space [Armstrong] First dual launch and docking with the Agena target	GT-8
09/12/1966	First orbit Rendezvous and docking	GT-11
01/27/1967	First scheduled manned Apollo flight ended in tragedy with the loss of three astronauts [White/Grissom/Chaffee]	Apollo 1 [AS-204]
10/11/1968	First test of Apollo Command/Service Module in Earth orbit operated by astronauts in flight First manned mission in Apollo lunar landing program First manned launch from LC 34 First Saturn IB manned flight First CSM rendezvous & station-keeping maneuvers First extensive checkout of CSM systems during mission First eight Service Propulsion System firings First CM landing in ocean First live network TV broadcast from space First astronauts to experience head colds during mission	Apollo 7 [Saturn IB] [AS-205] [CSM-101]
12/21/1968	First men to reach the vicinity of the moon First manned flight launched from LC 39A First manned spacecraft landing in darkness First manned flight to orbit the Moon First pictures of the Earth taken from the Moon First manned flight to escape Earth's gravity First audio-video communication from lunar distance First manned Saturn V launch First crew to spend Christmas in space First humans to see far side of the Moon	Apollo 8 [Saturn V] [AS-503] [CSM-103] [LTA-B]
03/03/1969	First manned flight test of lunar module First launch of complete Apollo configuration [Saturn V vehicle, CSM, and LM] First docking in space of CSM and LM First firing of LM ascent and descent engines in space First separation, rendezvous & redocking of two spacecraft First EVA by an astronaut completely free of spaceship life support equipment [Schweickart, LM Pilot] First astronauts to transfer from one spacecraft to another [McDivitt and Schweickart]	Apollo 9 [Saturn V] [AS-504] [CSM-104 Gumdrops] [LM-3 Spiders]

DATE	MANNED EVENTS	MISSION
05/18/1969	First crew that shaved in space First transmitted color photographs of the full Earth with Westinghouse color TV camera First demonstration rendezvous in lunar orbit First burning of LM descent stage engine in lunar landing configuration First LM steerable antenna at lunar distances First LM within 15,240 meters of lunar surface First in-flight test of the abort guidance system First in-flight use of VHF ranging First landing radar test in near-lunar environment First manned navigational, visual, and photographic evaluations First launch from Launch Complex 39B	Apollo 10 [Saturn V] [AS-505] [CSM-106 Charlie Brown] [LM-4 Snoopy]
07/16/1969	First manned landing on the Moon and return First lunar surface EVA First man-made items on lunar surface First human foot print of lunar surface First seismometer deployed on Moon First laser reflector deployed on Moon First solar wind experiment deployed on Moon First lunar soil and rock samples returned to Earth First test of landing radar and other landing systems on LM under operational conditions First use of mobile quarantine facility First use of the Lunar Receiving Laboratory at MSC First meal eaten on Moon consisted of four bacon squares, three sugar cookies, peaches, pineapple-grapefruit drink and coffee.	Apollo 11 [Saturn V] [AS-506] [CSM-107 Columbia] [LM-5 Eagle]
11/14/1969	First use of S-IVB stage to perform an evasive maneuver First use of a hybrid trajectory First demonstration of a point-to-point landing capability First use of two lunar surface EVA periods First Apollo Lunar Surface Experiments Package [ALSEP] deployed on Moon First {and only} humans to see Sun eclipsed by Earth First deployment of the erectable S-band antenna First use of geologist to plan lunar surface traverse in real time First documentation of samples as they were taken First double core tube sample taken First return of spacecraft parts from lunar surface [Surveyor 3] First Saturn V hit by lightning [while passing through a low cloud the vehicle caused an electrical discharge through the Saturn to the ground] First multispectral terrain photography from lunar orbit	Apollo 12 [Saturn V] [AS-507] [CSM-108 Yankee Clipper] [LM-6 Intrepid]
04/11/1970	First American orbital emergency during mission First operational problem-solving on real-time basis First use of LM as "lifeboat" when SM was powered down First operational firing of lunar module descent engine in lunar to change velocity of CSM/LM while docked First attitude positioning of CSM/LM with LM guidance systems First demonstrated feasibility of conserving consumables by powering down CSM First safe recovery of astronauts from disabled CSM First manned mission to experience engine cutoff	Apollo 13 [Saturn V] [AS-508] [CSM-109 Odyssey] [LM-7 Aquarius]
01/31/1971	First astronaut to wear red racing stripes on spacesuit [Shepard] First and only golf ball hit on Moon [Shepard] First use of mobile equipment transporter First use of shortened descent and rendezvous technique First extensive orbital science period conducted during CSM solo operations	Apollo 14 [Saturn V] [AS-509] [CSM-110 Kitty Hawk] [LM-8 Antares]

DATE	MANNED EVENTS	MISSION
07/26/1971	First use of Lunar Roving Vehicle on Moon First lunar orbital science payload carried in SM bay and operated by CSM pilot. First ground-controlled remote operation of TV camera on the Moon First sub-satellite launched from CSM in lunar orbit First space walk from CM during return flight to Earth First Apollo all-Air Force crew First piece of sculpture on Moon [Fallen Astronaut]	Apollo 15 [Saturn V] [AS-510] [CSM-112 Endeavour] [LRV-1]
04/16/1972	First landing in and exploration of lunar highlands	Apollo 16 [Saturn V] [AS-511] [CSM-113 Casper] [LM-11 Orion] [LRV-2]
12/07/1972	First scientist [geologist] astronaut in space [H. Schmitt] First longest single lunar surface excursion First longest total lunar surface excursion First longest lunar distance traveled by LRV on one traverse First nighttime launch	Apollo 17 [Saturn V] [AS-512] [CSM-114 America] [LM-12 Challenger] [LRV-3]
05/14/1973	First largest habitable structure placed in orbit [to date]	Skylab 1 [Saturn V] [AS-513]
05/25/1973	First manned visit to Skylab workshop First three-man crew to stay in space for 28 days First major repairs to an orbiting space station First occupancy of a US space station & working laboratory	Skylab 2 [Saturn IB] [AS-206] [CSM-116]
11/16/1973	Was the longest US mission. 1,214 orbits which lasted 84 days, 1 hour, 15 minutes and 32 seconds First crew to spend Christmas in a Space Station workshop environment First strike in space [astronauts unhappy with workload]	Skylab 4 [Saturn IB] [AS-208] [SM-119]
07/15/1975	First joint Russian and American space venture First major cooperation between only two nations engaged in manned space flight First meeting of two manned spacecraft of different nations in space First docking and first visits by astronauts and cosmonauts into each other's spacecraft. First International manned space flight	Apollo Soyuz Test Project [ASTP] [Saturn IB] [AS-210] [CSM-111]

DATE	SPACE SHUTTLE EVENTS	MISSION
06/18/1977	First 747/carrier flight of the space shuttle orbiter.	Enterprise
08/12/1977	First manned free flight of a space shuttle [F. Haise & G. Fullerton]	Enterprise
12/23/1977	First reported successful conclusion for the open sea tests on shuttle retrieval equipment conducted at Port Everglades, FL	N/A
03/24/1979	First time a space shuttle was transported to its launching base when Columbia arrived at KSC	Columbia
05/01/1979	First time the complete space shuttle configuration was assembled in the VAB & transported to LC 39A	Enterprise
02/20/1981	First Flight Readiness Firing [FRF] of shuttle main engines	STS 1 [Columbia]
04/12/1981	First flight of Space Transportation system reusable space vehicle which provided the first successful retrieval of the Solid Rocket Boosters [SRB] on 4/13/1981	STS 1 [Columbia]
11/12/1981	First re-use of a manned space vehicle	STS 2 [Columbia]
03/22/1982	First landing at White Sands	STS 3 [Columbia]
11/11/1982	First Getaway Specials aboard a shuttle mission	STS 4 [Columbia]
11/11/1982	First operational STS mission; First deployment of two commercial communications satellites; First spacecraft crew of four; and First flight of mission specialist astronauts [J. Allen & W. Lenoir]	STS 5 [Columbia]
04/04/1983	First flight of the orbiter Challenger. First Tracking and Data Relay Satellite successfully deployed. First Space Walk of Shuttle program [D. Peterson & S. Musgrave]	STS 6 [Challenger]
06/18/1983	First flight by an American woman astronaut [S. Ride]	STS 7 [Challenger]
08/30/1983	First night launch and landing of a space shuttle. First space flight by an African American - [G. Bluford] First night landing at Edwards AFB.	STS 8 [Challenger]
11/28/1983	First Spacelab mission [Spacelab-1]. First rollback First flight with six crew members in single spacecraft First ESA astronaut representative [U. Merbold] First flight of payload specialist [B. Lichtenberg].	STS 9 [Columbia]
02/03/1984	First untethered space walks performed in space. First use of the Manned Maneuvering Unit [MMU]. First satellite refurbished & flown again [SPAS] First manned spacecraft to return to launch site on landing. First shuttle landing at KSC [Challenger] on 2/11/1984 @ 7:16 am First woman test conductor during US space shot	STS 41B [Challenger]
04/06/1984	First in-flight capture, repair and redeployment of an orbiting satellite. [SMM and LDEF] First direct ascent trajectory for space shuttle	STS 41C [Challenger]
08/30/1984	First flight of orbiter Discovery. First pad abort at T-4 seconds First deployment of three satellites on single mission.	STS 41D [Discovery]
10/05/1984	First flight involving 2 women; [S. Ride/K. Sullivan]. First American woman to walk in space [K. Sullivan].	STS 41G [Challenger]
11/08/1984	First retrieval and return of satellites from Earth orbit.	STS 51A [Discovery]
01/24/1985	First mission totally dedicated to DOD	STS 51C [Discovery]
04/12/1985	First Congressional observer to make a space flight [Sen. Jake Garn]	STS 51D [Discovery]

DATE	SPACE SHUTTLE EVENTS	MISSION
04/29/1985	First operational flight for the ESA - Spacelab 3. First flight for animals with flight crew - two monkeys and 24 rodents.	STS 51B [Challenger]
10/03/1985	First flight of orbiter Atlantis.	STS 51J [Atlantis]
10/30/1985	First dedicated German Spacelab mission.	STS 61A [Challenger]
01/12/1986	First flight of Columbia after major modifications	STS 61C [Columbia]
01/28/1986	First in-flight accident involving a space shuttle First teacher in space First Shuttle launch from LC 39B First woman astronaut to die during space flight	STS 51L [Challenger]
09/29/1988	First flight of space shuttle since Challenger accident [Discovery]	STS 26 [Discovery]
05/04/1989	First US Planetary mission in 11 years First on Shuttle mission [Magellan]	STS 30 [Atlantis]
01/09/1990	First night launch since Return to Flight	STS 33 [Discovery]
02/28/1990	First shuttle flight delay due to crew member's illness [J. Creighton]	STS 36 [Atlantis]
04/28/1991	First unclassified DOD payload	STS 39 [Discovery]
08/02/1991	First scheduled landing at KSC since 1986	STS 43 [Atlantis]
05/07/1992	First flight of orbiter Endeavour. First use of drag chute during landing; deployed after nose gear touchdown for data collection only First US orbital flight to feature four EVAs [Thuot/Akers/Thornton/Hieb]	STS 49 [Endeavour]
06/25/1992	First Extended Duration Orbiter mission First landing at KSC for orbiter	STS 50 [Columbia]
09/20/1992	First time drag chute deployed in operational mode before nose gear touchdown First African-American woman to fly in space [M. Jemison] First married couple to fly in space [M. Lee & J. Davis]	STS 47 [Endeavour]
06/21/1993	First flight of the Spacehab module.	STS 57 [Endeavour]
09/12/1993	First KSC end of mission night landing	STS 51 [Discovery]
10/18/1993	First longest shuttle mission. [225 orbits.]	STS 58 [Columbia]
12/02/1993	First Hubble Space Telescope Servicing mission	STS 61 [Endeavour]
02/03/1994	First flight of a Russian Cosmonaut aboard US shuttle [S. Krikalev]	STS 60 [Discovery]
09/20/1994	First untethered US space walk in 10 years [M. Lee & C. Meade] First flight of Lidar In-space Technology Experiment [LITE]	STS 64 [Discovery]
02/03/1995	First female Shuttle pilot [E. Collins] First approach/fly around with Space Station Mir	STS 63 [Discovery]
03/18/1995	First Internet linkup	STS 67 [Endeavour]
06/27/1995	First Shuttle-Mir docking	STS 71 [Atlantis]
07/13/1995	First use new Mission Control Center, JSC	STS 70 [Discovery]
09/07/1995	First time two different payloads were retrieved and deployed during same mission	STS 69 [Endeavour]
09/16/1996	First US crew exchange First US world human spaceflight record set [S. Lucid]	STS 79 [Atlantis]

DATE	SPACE SHUTTLE EVENTS	MISSION
11/19/1996	First time 2 free-flyers deployed and retrieved [ORFEUS-SPAS II and the Wake Shield Facility-3]	STS 80 [Columbia]
11/19/1997	First Heads-Up ascent	STS 87 [Columbia]
01/22/1998	First flight Space Shuttle Main Engine [SSME] Block 11A	STS 89 [Endeavour]
10/29/1998	First Mercury astronaut to fly in space shuttle [J. Glenn] First flight Space Shuttle Main Engine-Block II	STS 95 [Discovery]
12/04/1998	First USA Space Station Assembly Flight	STS 88 [Endeavour]
07/23/1999	First flight with female mission commander [E. Collins]	STS 93 [Columbia]
12/19/1999	First Space Shuttle crew to spend Christmas in Space	STS 103 [Discovery]
05/19/2000	First flight of the glass cockpit	STS 101 [Atlantis]

SPECIAL NOTE: 1997 was the **first** year that every flight ended with a KSC landing.

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